

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027322**Date Inspected:** 14-Mar-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Bernie Docena		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No
Weld Procedures Followed:	Yes	No
Verified Joint Fit-up:	Yes	No
Approved WPS:	Yes	No
Delayed / Cancelled:	Yes	No

Bridge No: 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

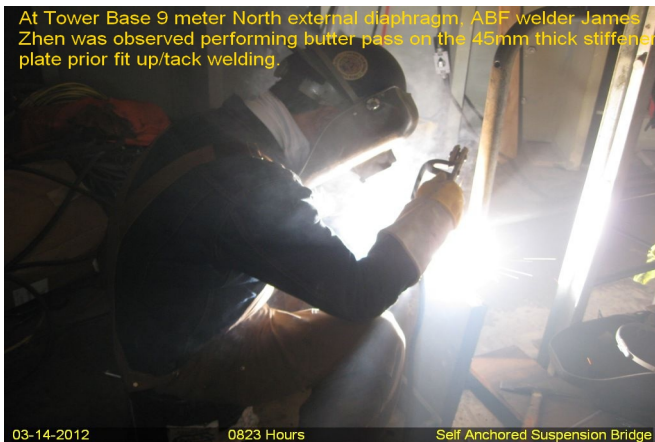
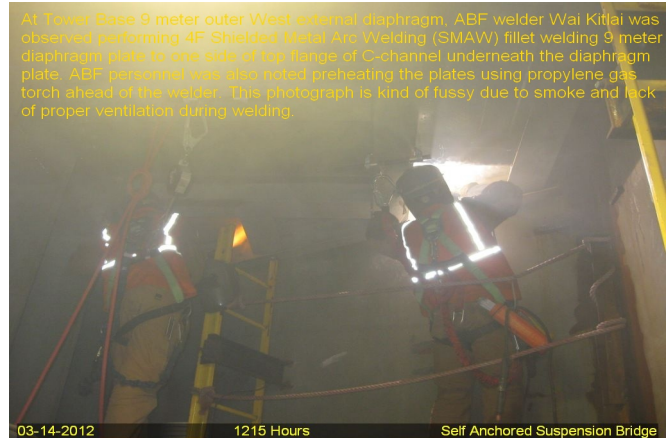
At Tower Base 9 meter outer West external diaphragm, this QA Inspector randomly observed ABF personnel Wai Kitlai perform 4F (overhead position) fillet production welding on the C10 channel to 45mm thick diaphragm plate fillet weld joint 098-3. The welder was noted welding 6mm fillet between one side of the channel top flange and diaphragm plate per detail 1 of the ZPMC drawing number FW3. The welder was using the 1/8" diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. This QA Inspector observed ABF personnel using propylene gas torch to preheat the plates being welded prior welding. This QA Inspector observed QC Inspector Bernie Docena using a Fluke infra red temperature gauge to verify the preheat temperature of more than 150°F. This QA Inspector performed a verification of the welding parameters and observed 130 amperes on the 1/8" diameter electrode. The welding appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-DF1200A. At the end of the shift, the welder has partially completed the 6mm fillet weld on North side of the outer West diaphragm.

At Tower Base 9 meter North external diaphragm, this QA Inspector randomly observed ABF welder Xiao Jian Wan perform weld butter on 45mm stiffener plate due to excessive root gap. The welder was noted using Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing Caltrans approved welding procedure ABF-WPS-D15-F1200A. During the shift, ABF QC John Pagliero was noted monitoring the parameters of the welder. Butter welding on one stiffener plate was completed at the end of the shift.

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At Tower Base 9 meter outer West external diaphragm, this QA together with ABF QC Jesse Cayabyab perform verification fit up/tack welding on the drop in plate WD1-A46. The root opening was measured less than 5mm and the offset alignment was measured less than 2mm which appears in conformance to the contract requirement. Although the fit up was accepted, welding was not done today due to bad weather at the Baybridge.



Summary of Conversations:

Today's weather at the job site was rainy and windy. Due to this weather condition, most of the ABF welders were sent home except the crew of ABF Superintendent Dan Ieraci. The welders who were left at site worked at the tower base 9 meter diaphragm where running rain water was not as bad as the top deck. The welders were able to do some fillet welding and buttering but they were just minimal.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer